

AuSCR Research Task Group approved projects

Title	Australian paediatric AIS treatment in adult compared to paediatric hospitals
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AuSCR role	Data provision
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Status	In progress

Summary

Intravenous and endovascular thrombolysis and clot retrieval therapies are well established through several randomised trial in adult ischemic stroke. Specialised multidisciplinary stroke units in primary adult stroke centres are dedicated to delivering gold-standard care.

Despite the lack of large trials in children, there is emerging uncontrolled evidence to support the safety of reperfusion therapies in arterial ischemic children with good outcomes from endovascular clot retrieval in AIS with LVO also reported. However, childhood stroke management has been fraught with diagnostic delays due to combination of factors including high frequency of stroke mimics in children, lack of awareness amongst parents and paediatric healthcare providers and reduced access to imaging. The 2017 national stroke guidelines has led to the development of criteria for primary paediatric stroke centres with acute code stroke protocols aiming to streamline this process to make it possible to offer hyperacute therapies within the recommended time window.

The AuSCR is an important source of paediatric data from children who have presented to primary adult as well as primary paediatric stroke centres with arterial ischemic stroke.

The primary aim of the proposal is to report acute stroke management and outcomes in Australian children with arterial ischaemic stroke (AIS) treated in primary adult stroke centres compared to primary paediatric stroke centres from 2015 to 2020.

Hypothesis: Time to AIS diagnosis is shorter and rates of reperfusion therapies are higher in children treated at primary adult stroke centres compared to primary paediatric stroke centres prior to the implementation of code stroke protocols at the paediatric centres.